

AcE-Bs 2012 Bangkok
ASEAN Conference on Environment-Behaviour Studies,
Bangkok, Thailand, 16-18 July 2012

Cultural Determinants in the Design of Bugis Houses

Wan Hashimah Wan Ismail*

*Department of Architecture, Faculty of Built Environment, Universiti Teknologi Malaysia,
81310 Skudai, Johor, Malaysia*

Abstract

As elaborated by scholars, the built environment is influenced by culture, belief and past experiences. The paper intends to elaborate on the cultural determinants in the design of the Bugis traditional houses found in Johor, Malaysia. The methodology involved two main instruments, namely literature review and field observation. The studies suggest that even though the houses were built away from their homeland in Sulawesi, Indonesia, the culture of the Bugis descendants remains intact. This was revealed in their behaviour and the forms of the plans and elevations of their traditional houses.

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Keywords: Culture; traditional houses; Bugis; design

1. Introduction

The built environment is influenced by culture, belief and past experiences of its inhabitants, as elaborated by scholars such as Rapoport (1977, 2004), Gustafson (2001), etc. Apart from beliefs, Altman and Low (1992) also relate culture to perception, values and norms, customs and mode of appropriate behaviour that constitute a cluster of characteristics. The suggestion is supported by Gustafson (2001) who argues that the cultural aspects of place involve meanings related to the environment. This can be linked to their opinion that place attachment involves culturally shared affective meanings and activities associated with place that derived from socio-political, historical and cultural sources. The complexity of the culture that distinguishes one group from the others can be reflected through the variation of the

* Corresponding author. Tel.: +6-016-765-1378; fax: +6-07-556-6155
E-mail address: wshimah@yahoo.com.

environment (Rapoport, 1977, 2004). In Malaysia for instance, the cultural principles play an important role in defining the identity of different ethnic groups that influence the character of the places they inhabited.

In Malaysia the cultural influences seem to be more evident in the design of traditional houses rather than contemporary mass housing. This is basically due to the fact that the traditional houses were individually designed according to the desire of the perspective owners. The mass housing on the other hand, are designed by architectural teams and using typical design for particular housing estates to save building cost. The residents in this case have to tailor suit themselves to the house forms.

The paper intends to elaborate on the cultural determinants in the design of one of the traditional houses found Malaysia that is the Bugis traditional houses in Johor. The objectives were to clarify the details of the cultural influences that determine the formation of the Bugis traditional houses in Malaysia.

2. Methodology

The methodology involved two main instruments namely literature review and field observation. The main concern in the literature review was the cultural background of the Bugis and the connection to their house forms. The Bugis houses were initially visited to get the first hand experience. The documentation in terms of measured drawing was done by Pusat Kajian Alam Bina Dunia Melayu (KALAM), the Architecture Department of Universiti Teknologi Malaysia. Altogether 30 Bugis houses were documented; 21 in Benut and Pontian, Johor, Malaysia and 9 in Makasar, Bone and Wajo in South Sulawesi (Celebes), Indonesia. The houses were further analysed focusing on the cultural determinants in the formation of building form, plan and elevation of the Bugis houses in Johor. The Bugis houses in Makasar, Indonesia were used as comparison. Only then the deductions and conclusion were made.

3. History of the migration of Bugis

The people of Bugis were originally the residents of South Sulawesi, Indonesia. Leirissa (1996) posits that after the kingdoms of Makasar and Bone united, it became the biggest kingdom in Indonesia in the 17th century. The turmoil started after the arrival of the Dutch East India Company (V.O.C) in expeditions with the goal of trading for pepper and spices (Blusse, 1996). In their attempt to monopolise the spice trade, the V.O.C. allied with the resentful Bugis of the Bone kingdom to destroy Makasar in 1669. This resulted in two consequences. First, Bone became the most important kingdom and second, it led to the migration of the Bugis of Makasar. This situation became worse with the wars between the Bugis and the Dutch between 1825 and 1905 that ended the power of the Bugis ruling dynasties. It was during this period that more Bugis migrated to the other parts of Indonesia or other countries including Malaysia (Fig.1).



Fig.1.Areas of Bugis trade and settlement; Source: Leirissa (1996)

The other reason for migration was due to the proclamation of the ruler of Riau-Lingga (now in Indonesia) as the ruler of Johor starting with Temenggong Abdul Rahman in 1812 (Khoo, 2001). The migration of people from the other parts of Indonesia to Johor was inevitable since it was under the same leadership. It should also be noted that trading activities has been going on for years connecting the people of different ethnic groups within the region, as noted by Leirissa (1996).

Job opportunities were the other reasons for migration. Trocki (2001) elaborates that in the 1850s to the first half of the second half of the 19th century the main crop planted in Johor was gambier and pepper. The rulers developed Johor with the revenues from these crops. The estates were managed by the Chinese Teochew towkays with almost 100,000 Chinese immigrants. In the early 20th century, the lands were converted to rubber and other crops, such as oil palm and pineapple. This opened up the job opportunities for the other ethnic groups including the Bugis. Two examples of the Bugis who were attracted to job opportunities were Haji Kunok and Daeng Telibah, the owners of houses studied. Haji Kunok started as a worker of oil palm plantation, managed to find fortune and decided to settle down permanently in Johor. Daeng Telibah on the other hand opened land with friends and developed into oil palm estates. They had to build houses for their basic needs. Subsequently, the migration of the Bugis also relates to the building of Bugis houses in Johor.

4. Culture of the Bugis

When the Bugis people fled from their homeland in South Sulawesi, Indonesia it is assumed that they brought with them their own culture including their beliefs. This assumption was checked through the analysis of the Bugis houses.

From the literature review it was found that the Bugis were subjected to several beliefs. The earlier beliefs of the people in Indonesia include indigenous religious traditions, Buddhist and Hindu (Miksic, 1996). The indigenous religious traditions of Bugis as mentioned on *Sure' Galigo* (a written document) is the belief in god *Patoto-e* who is believed to hold human fate. This god is said to have representatives such as *Seuwa-e* and *Tuie a' rana* to take care of events and happenings relating to human beings. Apart from that ancestor worship is also practiced. It is believed that the ancestors need to be worshiped in order to avoid calamities. That is why the Bugis give offerings to the ancestors when they achieve something or being safe.

The Bugis also believe in the existence of spirits (*sumange*) that adhered to things in the nature such as river, mountain, stone or big trees and even to house, the new born and sacred sites as highlighted by Waterson (1998). Their beliefs are similar to that of the other people throughout the Southeast Asian world in that power or vitality, being distributed throughout the cosmos. In fact, every object is thought to have its own animating spirit (*sumange*), whose welfare must be catered to ensure good fortune and avert catastrophe.

After the arrival of Islam in south Sulawesi at the turn of 17th century almost all Bugis adhere to Islam. However, there is a great variation in the types of Islam practiced (Othman, 1998). Nevertheless, for some Bugis their practice also relates to the earlier indigenous religious traditions that could not be forsaken totally. This includes the offerings to the spirits of ancestors and deceased powerful personages. For those who fully adhered to Islamic teachings, the offerings in the form of food are no longer practiced. Some Bugis in South Sulawesi have remained to embrace Hinduism. This includes the ancestors of Ngati and even Ngati herself, the owner of one of the houses studied (KALAM, 2012).

5. Culture relating to houses

According to Waterson (1998), the rituals traditionally connected with house building show some similarities among societies in Malaysia, Indonesia and Thailand. From the written documents, it was found that the practices based on the culture of the Bugis started even before the houses were erected. An

expert of tradition called *panrita bola* makes a ritual to choose the spot where the house is to be built. Sometimes buffalo head is buried as the ritual to avoid the bad luck that might face the house. Appropriate rituals need to be performed before trees could be cut or to clear the land for building houses since trees are regarded as having their own vitality or spirit. The other aspect of the building principle is positioning of the posts in the house in exactly the same way as extracted from the tree that is with the trunk end down. The Bugis believe that if it is done otherwise, misfortune will befall on the occupants.

Waterson (1998) elaborates that the initial ritual in building the house includes the direct involvement of the woman of the house. The woman must place her hand on the main post (*tiang seri*) as it is being erected. The houses also need to connect directly with the occupants through the measurements of the woman of the house. The explanation of the connection to woman was not given. The simple explanation on this is probably due to the fact that the woman is the one who actually use the house for the whole day. Conformation of the house forms to her anthropometric would make it easier to get the daily tasks done.

The Bugis have contrasting beliefs in terms of the interior and exterior of the house. The exterior of the house is considered dangerous due to the residing of a spirit known as *to laing*, and other ghosts. Thus, they feel unsafe outside and can only be safe if they observe inner strength. This inner strength (*prangirreng*) can be achieved through meditation by focusing oneself for health and spirituality. Thus, they would meditate before leaving the house. On returning home, one would shake oneself on the upper thread of the staircase before entering the house. Noris (1996) stresses that this practice is done to get rid of the bad influences adhered to the body when they were outside the house.

On the contrary, the interior of the house is considered to be a safe haven for the residents where they are free to do anything. However, some evil spirits may still be able to slip through. According to Errington (1979) the Bugis believe that dangers from outside can slip through the holes or the openings of the house. The most dangerous part of the house is the hole near the apex of the roof. The residents of the house can also be affected by the sorcery (*sihir*) brought by the wind if one stands next to the window. This is similarly stressed by Waterson (1998) mentioning that pieces of Islamic calligraphy are set above the doors and windows to serve as protective elements to ward off evil influences.

6. House forms of the Bugis

Djahhari (1990) posits that the Bugis house form in South Sulawesi relate to their culture. This includes the form of the house, roof, roofing material, staircase, column and other elements. The house forms vary according to the district and the beliefs of the local people. Bugis houses has steeply inclined long ridged roof. In some houses the ends of each main ridge is finished by upright sharp wooden projection. It has two-tiered gable end and one has the door of the main entrance.

One part of the Bugis culture that relate to cosmology is in the 3 layering of their house form (Figure 2). The uppermost layer is the area below the roof and is known as *rekkeang* or *pemmakkang*. It is for the holy spirits and valuable items, such as rice and inherited goods. The central layer is known as *alebola* or *kaleballa* and is the place where the residents live that relate to their position in the middle of the cosmos. The lowest layer or the area below the floor is for the evil spirits known as *awas* or *passiringang*. For some houses this is a dirty place with rubbish and where the pets or domestic fowls are reared. On contrary, it can also be a clean place with some seating area and forms an additional part of the house for gathering and relaxing.



Fig. 2. Section of Telibah's house, Johor; Source: KALAM (2011)

All the Bugis houses studied conformed to the three layer division according to the cosmos. The area below the houses of Haji Kunok and Masih for instance, were used for storing gardening tools as they were farmers and also for motorcycles.

Apart from the belief relating to the cosmos the climate could be the other explanation for having the three layers of built form. Both Johor and South Sulawesi have equatorial climate meaning that there is lots of sun and rain throughout the year. The timber floor of the house is normally raised to keep it dry and clean.

7. House plans

Basically the plan of the Bugis houses consists of several rectangular forms or sections known as *lontang*. There could be between 2 to 8 sections (*lontang*) in each house. The simplest form of a house has 2 rectangular sections (*lontang*) consisting of the central section of the house (*ri tengnga*) and joined with the kitchen (*ri laleng*) at the back. Djauhari (1990) posits that the original Bugis house has an open interior without any partitions. A good example of this is Ngati's house in Makasar, Indonesia. The main house has no partition even though the whole area is used for several functions such as sleeping and cooking (Figure 3). The houses of the Bugis also display their status in the society. The houses of the aristocrats can have up to 8 sections (*lontang*). This is exemplary in Saoraja's house in Bone, South Sulawesi that is the biggest Bugis house studied.

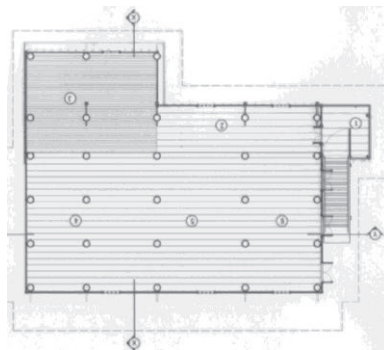


Fig.3. Plan of Ghati's house; Source: KALAM (2012)

An extension may be built to the front and the back of the 2 sections (*lontang*). The later addition is the front section (*ri saliweng*) at the front of the house which is also rectangular but with a slightly lower floor level. This section is used for receiving visitors and has the biggest area. The veranda (*lego-lego*) is also added to the front section (*ri saliweng*) and has staircase to the ground level (Figure 4).

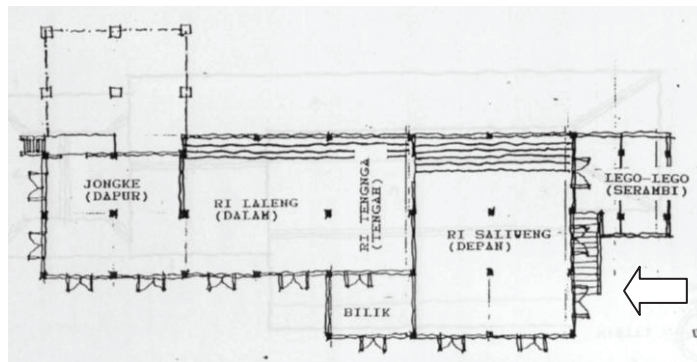


Fig. 4. Plan of Haji Kunok's house; Source: Noris (1992)

The visitors would normally stay in the veranda before they are invited into the front section (*ri saliweng*). This relates to the cultural practices whereby the interior of the house is considered private and for the residents only. The veranda is also used by the residents to relax since it has no wall. It was noticed that the door to enter the front section (*ri saliweng*) of Haji Kunok's house is low. This is actually part of the culture whereby one needs to bend slightly as a kind of respecting the house or the residents before entering.

Next is the central section of the house (*ri tengga*). This is where the main post (*tiang seri*) is placed. It is believed that the spirit of the house (*semangat rumah*) lives in the main column or the main post (Waterson, 1998). It is believed that the guardian of the house known as Ampo Banua (*dewi pelindung rumah*) resides at the main post to safeguard the residents from any evil. The guardian is thus given an offering on a weekly basis. The place where the main post is positioned is considered as the safest and holiest in the house. The positioning of the main post is thus crucially important. This is where the valuables of the house are kept. Thus, this section (*lontang*) is sacred and not for the visitors. In some houses an additional room for sleeping is added and attached to the central section of the house. The position of the main posts of all the Bugis houses studied conformed to the beliefs mentioned earlier.

The next area is the inside section (*ri laleng*) that is the sleeping zone of the family. It is normally divided into two sections. The inner one is for the young lady while the outside section is for the parents. This is also part of the culture whereby the lady is hidden from the eyes of the visitors until she got married. The furthest section is the kitchen (*jongke*). This is where the food is cooked and also serves as the dining area.

All the Bugis houses studied consist of at least 2 sections (*lontang*). None of the Bugis houses in Johor were built without partition as exemplary by Ngati's house. This shows the need for privacy is greater among the residents of the Bugis houses in Johor. All the Bugis houses studied have similar sequence in the arrangement in terms of the sections (*lontang*) inside the house. What makes the difference between one house to the other is the sizes and the positioning of the sections (*lontang*).

The staircase is placed at one end of the house and sheltered by the roof. The simple houses, such as Ngati's house (Figure 3) have a single staircase only. All the Bugis houses studied in Johor have at least

two sets of staircases. This is to ensure separate entrances according to gender. The male guests would enter through the front staircase while the female is through the one that is connected to kitchen area (*jongke*). The second staircase is also used to go to the toilet or the well or water sources at the back.

There are two main differences between the plans of Johor traditional houses and Bugis houses. Firstly, the entrances for the Bugis houses are at the gable while that of the Johor traditional houses are at the side (compare Figure 4 and Figure 5). Secondly, the difference is in terms of the connection between the different spaces. In Bugis houses, the different sections (*lontang*) are connected with an indoor corridor known as ‘tamping’. This connection is absent in the Johor traditional houses. The connection between the main section to the kitchen area is through a neck-like section known as ‘kelek anak’ (Figure 5).

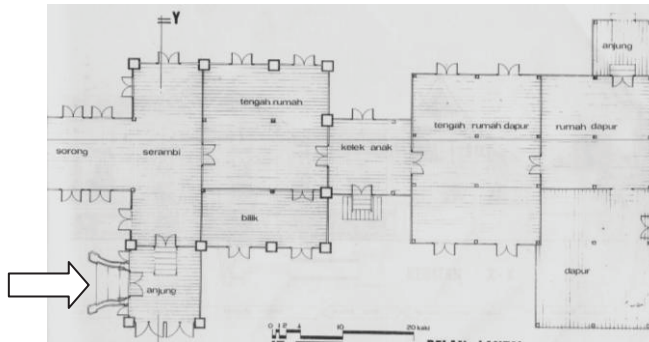


Fig.5. Plan of Elias's house, a Johor traditional house; Source: KALAM (1985)

8. Elevation

One characteristic of the Bugis house is the existence of three windows on the side elevation as shown on Daeng Mat Diew's house (Figure 6). The windows are built one on each bay and symmetrically arranged. This 3 bay ruling is not found on all the Bugis houses studied in Johor, Malaysia. The other houses with the 3 windows include that of Haji Kunok's house, Masik's house and Marilalang's house (Fig.7).

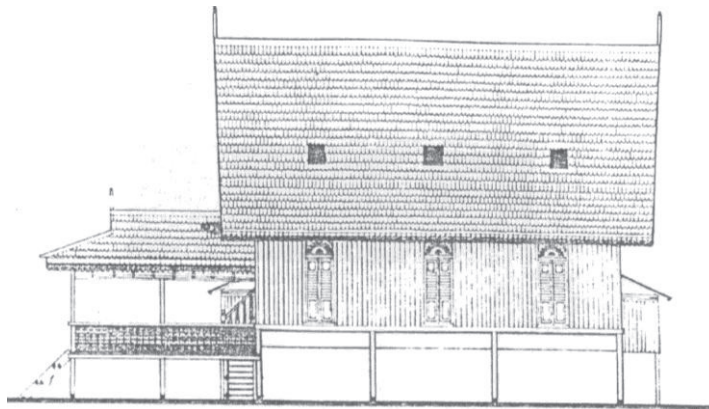


Fig. 6. Elevation of Daeng Mat Diew's house; Source: KALAM (1981)

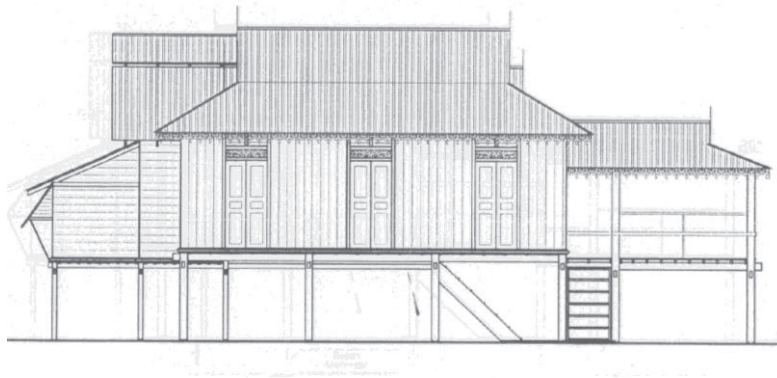


Fig.7. Elevation of Marilalang's house; Source: KALAM (2007)

It should be noted that some of the houses studied were built by Bugis craftsmen. An example is Haji Kunok's house that was built by Masih, a craftsman from his hometown in South Sulawesi (Noris, 1992). The other example is Daeng Mat Diew's house that was built by craftsmen from Kalimantan (Abdul Halim, 1987). Even the timber roofing tiles (*belian*) were brought from there. This explains the adherence of the houses to the Bugis house forms in South Sulawesi.

It was found that even though the plans of the houses still retain the sequence of inner sections (*lontang*) as that of the Bugis, some of the houses in Johor have adapted to Johor traditional house roof form. This is exemplified by the roof of Marilalang's house. This was because it was built by Johor local craftsmen. Bugis houses normally have steeply inclining roofs with two-tiered gable while Johor traditional houses have what is known as 'limas' roof as exemplary by the roof of Marilalang's house (Figure 7).

9. Summary

There are some similarities in the house forms, plans and elevations of the Bugis houses in Johor, Malaysia to those found in South Sulawesi, Indonesia. All the houses conform to the layering of the cosmos in term of the house section. All the houses studied have at least two basic sections (*lontang*) and the sequence of spaces shows the adherence to the culture of the Bugis. This indicates that their culture plays a dominant role in the formation of the houses. A deviation from the practices in South Sulawesi is in the form of the roofs due to the use of local craftsmen in Johor (Table 1). The majority of the houses studied have 'limas' roof form that relates to Johor traditional houses.

Table1. Comparison between the Bugis houses in South Sulawesi, Indonesia and those in Johor, Malaysia

No.	Position	Characters That Relate To Bugis Culture, Exemplary By 9 Houses In South Sulawesi, Indonesia	Out Of 21 Samples Of Houses In Johor, Malaysia
1	House form	Relate to cosmology in 3 horizontal layering	All houses
2	Roof form	Simple double pitched roof	8 houses, the others have 'limas' roof form
3	Plan	Positioning of the main column (tiang seri) in the inside section (ri tengnga)	All houses
4	Plan	Arrangement of different sections (lontang) according to sequence	All houses
5	Plan	Main entrance at the gable and not at the side	All houses
6	Plan	Different sections connected by an indoor corridor (tamping)	All houses
6	Elevation	Existence of 3 windows on the side elevation	12 houses, the others have either 2 or more than 3 windows of same sizes

10. Conclusion

The findings suggest that there was a strong adherence to culture by the Bugis people in the form making of their houses. It suggested that even though the Bugis houses were built away from South Sulawesi, their homeland, the culture of the Bugis descendants remain intact. This was revealed in the house forms, plans and the elevations of the Bugis houses. What should be noted is that the Bugis did not come to Malaysia in large groups. It is unlike the Chinese who came in Malaysia in thousands as noted in Johor. As expected, the Chinese could retain their culture especially since they could mingle in their own people. Surprisingly, the Bugis managed to uphold their culture even though they live far apart from the other Bugis.

The studies also suggest that even though the traditional houses in Malaysia were built in the same climate with the same availability of local materials, the house forms of the Bugis differ. These unique characters of the Bugis traditional houses show the richness of traditional houses that are missing in the design of mass housing in Malaysia. Some of the qualities of the traditional houses including those of the Bugis may be considered in the form making of contemporary mass housing design. This may result in a sensitive design to suit the residents with similar cultural background in Malaysia.

The studies conducted covered only 30 samples of Bugis houses both in Johor, Malaysia and in South Sulawesi, Indonesia. Thus, the results are not conclusive but can give some suggestions and indications to help further researches.

Acknowledgements

This study was made possible by the continuous support from Universiti Teknologi Malaysia.

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